
Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)

217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=12; day=6; hr=15; min=39; sec=52; ms=749;]

Reviewer Comments:

First Sequence

Next Sequence

Previous Sequence

Last Sequence

Convert To Search Format

Go back to Table of Contents Page

Download All Sequences

Here is the list of the requested sequences:

<210> 9

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Derived peptide motif for HLA-A2.1 binding peptides

```
<221> VARIANT
<222> 1
<223> Xaa = Ile, Leu, Phe, Lys Met or Tyr
<220>
<221> VARIANT
<222> 2
<223> Xaa = Leu or Met
<220>
<221> VARIANT
<222> 3
<223> Xaa = Ala , Tyr Phe, Pro, Met or Ser
<220>
<221> VARIANT
<222> 4
<223> Xaa = Glu, Lys, Gly Pro, Asp or Thr
<220>
<221> VARIANT
<222> 5
<223> Xaa = Ile, Lys, Tyr, Asn, Gly, Val or His
<220>
<221> VARIANT
<222> 6
<223> Xaa = Val, Ile, Leu or Thr
<220>
<221> VARIANT
<222> 6
<223> Xaa = Ala, Tyr or His
<220>
<221> VARIANT
<222> 8
<223> Xaa = Lys, Glu or Ser
```

```
<220>
<221> VARIANT
<222> 9
<223> Xaa = Val or Leu
<400> 9
```

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa 1 5

Validated By CRFValidator v 1.0.3

Application No: 10559596 Version No: 2.0

Input Set:

Output Set:

Started: 2010-11-30 18:59:35.722 **Finished:** 2010-11-30 18:59:37.354

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 632 ms

Total Warnings: 6
Total Errors: 1

No. of SeqIDs Defined: 9

Actual SeqID Count: 9

Error code		Error Description						
W	213	Artificial or Unknown found in <213> in SEQ ID (1)						
W	213	Artificial or Unknown found in <213> in SEQ ID (2)						
W	213	Artificial or Unknown found in <213> in SEQ ID (3)						
W	402	Undefined organism found in <213> in SEQ ID (4)						
W	213	Artificial or Unknown found in <213> in SEQ ID (5)						
W	213	Artificial or Unknown found in <213> in SEQ ID (9)						
E	341	'Xaa' position not defined SEQID (9) POS (7)						

SEQUENCE LISTING

```
<110> Spies, Gregory A.
     Misher, Lynda
<120> DNA VECTORS
<130> 210121.579USPC
<140> 10559596
<141> 2010-11-30
<150> PCT/US2004/018529
<151> 2004-06-09
<150> US 60/477,232
<151> 2003-06-09
<160> 9
<170> FastSEO for Windows Version 4.0
<210> 1
<211> 2665
<212> DNA
<213> Artificial Sequence
<220>
<223> pUC9 plasmid
<400> 1
gegeecaata egeaaacege eteteceege gegttggeeg atteattaat geagetggea 60
cgacaggttt cccgactgga aagcgggcag tgagcgcaac gcaattaatg tgagttagct 120
cactcattag gcaccccagg ctttacactt tatgcttccg gctcgtatgt tgtgtggaat 180
tgtgagegga taacaattte acacaggaaa cagetatgae catgattaeg ecaagettgg 240
ctgcaggtcg acggatcccc gggaattcac tggccgtcgt tttacaacgt cgtgactggg 300
aaaaccctgg cgttacccaa cttaatcgcc ttgcagcaca tccccctttc gccagctggc 360
gtaatagcga agaggcccgc accgatcgcc cttcccaaca gttgcgcagc ctgaatggcg 420
aatggcgcct gatgcggtat tttctcctta cgcatctgtg cggtatttca caccgcatat 480
ggtgcactct cagtacaatc tgctctgatg ccgcatagtt aagccagccc cgacacccgc 540
caacacccgc tgacgcgccc tgacgggctt gtctgctccc ggcatccgct tacagacaag 600
ctgtgaccgt ctccgggagc tgcatgtgtc agaggttttc accgtcatca ccgaaacgcg 660
cgagacgaaa gggcctcgtg atacgcctat ttttataggt taatgtcatg ataataatgg 720
tttcttagac gtcaggtggc acttttcggg gaaatgtgcg cggaacccct atttgtttat 780
ttttctaaat acattcaaat atgtatccgc tcatgagaca ataaccctga taaatgcttc 840
aataatattg aaaaaggaag agtatgagta ttcaacattt ccgtgtcgcc cttattccct 900
tttttgcggc attttgcctt cctgtttttg ctcacccaga aacgctggtg aaagtaaaag 960
atgctgaaga tcagttgggt gcacgagtgg gttacatcga actggatctc aacagcggta 1020
agateettga gagttttege eeegaagaac gtttteeaat gatgageact tttaaagtte 1080
tgctatgtgg cgcggtatta tcccgtattg acgccgggca agagcaactc ggtcgccgca 1140
tacactattc tcagaatgac ttggttgagt actcaccagt cacagaaaag catcttacgg 1200
atggcatgac agtaagagaa ttatgcagtg ctgccataac catgagtgat aacactgcgg 1260
ccaacttact tetgacaacg ateggaggae egaaggaget aacegetttt ttgcacaaca 1320
tgggggatca tgtaactcgc cttgatcgtt gggaaccgga gctgaatgaa gccataccaa 1380
acgacgagcg tgacaccacg atgcctgtag caatggcaac aacgttgcgc aaactattaa 1440
```

```
ctggcgaact acttactcta gcttcccggc aacaattaat agactggatg gaggcggata 1500
aagttgcagg accacttctg cgctcggccc ttccggctgg ctggtttatt gctgataaat 1560
ctggagccgg tgagcgtggg tctcgcggta tcattgcagc actggggcca gatggtaagc 1620
cctcccgtat cgtagttatc tacacgacgg ggagtcaggc aactatggat gaacgaaata 1680
gacagatege tgagataggt geeteactga ttaageattg gtaactgtea gaccaagttt 1740
actcatatat actttagatt gatttaaaac ttcattttta atttaaaagg atctaggtga 1800
agateetttt tgataatete atgaeeaaaa teeettaaeg tgagtttteg tteeaetgag 1860
cgtcagaccc cgtagaaaag atcaaaggat cttcttgaga tccttttttt ctgcgcgtaa 1920
tctgctgctt gcaaacaaaa aaaccaccgc taccagcggt ggtttgtttg ccggatcaag 1980
agctaccaac tettttteeg aaggtaactg getteageag agegeagata ecaaatactg 2040
teettetagt gtageegtag ttaggeeace actteaagaa etetgtagea eegeetaeat 2100
acctcgctct gctaatcctg ttaccagtgg ctgctgccag tggcgataag tcgtgtctta 2160
ccgggttgga ctcaagacga tagttaccgg ataaggcgca gcggtcgggc tgaacggggg 2220
gttcgtgcac acagcccagc ttggagcgaa cgacctacac cgaactgaga tacctacagc 2280
gtgagctatg agaaagcgcc acgcttcccg aagggagaaa ggcggacagg tatccggtaa 2340
gcggcagggt cggaacagga gagcgcacga gggagcttcc agggggaaac gcctggtatc 2400
tttatagtcc tgtcgggttt cgccacctct gacttgagcg tcgatttttg tgatgctcgt 2460
caggggggcg gagcctatgg aaaaacgcca gcaacgcggc ctttttacgg ttcctggcct 2520
tttgctggcc ttttgctcac atgttctttc ctgcgttatc ccctgattct gtggataacc 2580
gtattaccgc ctttgagtga gctgataccg ctcgccgcag ccgaacgacc gagcgcagcg 2640
agtcagtgag cgaggaagcg gaaga
                                                                  2665
```

<210> 2

<211> 5736

<212> DNA

<213> Artificial Sequence

<220>

<223> pRSVneo plasmid

<400> 2

cttggaggtg cacaccaatg tggtgaatgg tcaaatggcg tttattgtat cgagctaggc 60 acttaaatac aattatetet geaatgegga atteagtggt tegteeaate eatgteagae 120 ctgtctgttg ccttcctaat aaggcacgat cgtaccacct tacttccacc aatcggcatg 180 cacggtgctt tttctctcct tgtaaggcat gttgctaact catcgttacc atgttgcaag 240 actacaagtg tattgcataa gactacattt ccccctccct atgcaaaagc gaaactacta 300 tatcctgagg ggactcctaa ccgcgtacaa ccgaagcccc gcttttcgcc taaacacacc 360 ctagtcccct cagatacgcg tatatctggc ccgtacatcg cgaagcagcg caaaacgcct 420 aaccctaagc agattettea tgeaattgte ggteaageet tgeettgttg tagettaaat 480 tttgctcgcg cactactcag cgacctccaa cacacaagca gggagcagat actggcttaa 540 ctatgcggca tcagagcaga ttgtactgag agtgcaccat atgcggtgtg aaataccgca 600 cagatgegta aggagaaaat accgcatcag gegetettee getteetege teactgaete 660 getgegeteg gtegttegge tgeggegage ggtateaget eacteaaagg eggtaataeg 720 gttatccaca gaatcagggg ataacgcagg aaagaacatg tgagcaaaag gccagcaaaa 780 ggccaggaac cgtaaaaagg ccgcgttgct ggcgtttttc cataggctcc gccccctga 840 cgagcatcac aaaaatcgac gctcaagtca gaggtggcga aacccgacag gactataaag 900 ataccaggeg tttecceetg gaageteect egtgegetet eetgtteega eeetgeeget 960 taccggatac ctgtccgcct ttctcccttc gggaagcgtg gcgctttctc atagctcacg 1020 ctgtaggtat ctcagttcgg tgtaggtcgt tcgctccaag ctgggctgtg tgcacgaacc 1080 ccccgttcag cccgaccgct gcgccttatc cggtaactat cgtcttgagt ccaacccggt 1140 aagacacgac ttatcgccac tggcagcagc cactggtaac aggattagca gagcgaggta 1200 tgtaggcggt gctacagagt tcttgaagtg gtggcctaac tacggctaca ctagaaggac 1260 agtatttggt atctgcgctc tgctgaagcc agttaccttc ggaaaaagag ttggtagctc 1320 ttgatccggc aaacaaacca ccgctggtag cggtggtttt tttgtttgca agcagcagat 1380 tacgcgcaga aaaaaaggat ctcaagaaga tcctttgatc ttttctacgg ggtctgacgc 1440 tcagtggaac gaaaactcac gttaagggat tttggtcatg agattatcaa aaaggatctt 1500 cacctagatc cttttaaatt aaaaatgaag ttttaaatca atctaaagta tatatgagta 1560

```
aacttggtct gacagttacc aatgcttaat cagtgaggca cctatctcag cgatctgtct 1620
atttcgttca tccatagttg cctgactccc cgtcgtgtag ataactacga tacgggaggg 1680
ettaccatet ggeeceagtg etgeaatgat aeegegagae eeaegeteae eggeteeaga 1740
tttatcagca ataaaccagc cagccggaag ggccgagcgc agaagtggtc ctgcaacttt 1800
atccgcctcc atccagtcta ttaattgttg ccgggaagct agagtaagta gttcgccagt 1860
taatagtttg cgcaacgttg ttgccattgc tgcaggcatc gtggtgtcac gctcgtcgtt 1920
tggtatggct tcattcagct ccggttccca acgatcaagg cgagttacat gatcccccat 1980
gttgtgcaaa aaagcggtta gctccttcgg tcctccgatc gttgtcagaa gtaagttggc 2040
cgcagtgtta tcactcatgg ttatggcagc actgcataat tctcttactg tcatgccatc 2100
cgtaagatgc ttttctgtga ctggtgagta ctcaaccaag tcattctgag aatagtgtat 2160
geggegaeeg agttgetett geeeggegte aacaegggat aataeegege eacatageag 2220
aactttaaaa gtgctcatca ttggaaaacg ttcttcgggg cgaaaactct caaggatctt 2280
accgctgttg agatccagtt cgatgtaacc cactcgtgca cccaactgat cttcagcatc 2340
ttttactttc accagcgttt ctgggtgagc aaaaacagga aggcaaaatg ccgcaaaaaa 2400
gggaataagg gcgacacgga aatgttgaat actcatactc ttcctttttc aatattattg 2460
aagcatttat cagggttatt gtctcatgag cggatacata tttgaatgta tttagaaaaa 2520
taaacaaata ggggttccgc gcacatttcc ccgaaaagtg ccacctgacg tctaagaaac 2580
cattattatc atgacattaa cctataaaaa taggcgtatc acgaggccct ttcgtcttca 2640
agaatteett tgeetaattt aaatgaggae ttaaeetgtg gaaatatttt gatgtgggaa 2700
gctgttactg ttaaaactga ggttattggg gtaactgcta tgttaaactt gcattcaggg 2760
acacaaaaaa ctcatgaaaa tggtgctgga aaacccattc aagggtcaaa ttttcatttt 2820
tttgctgttg gtggggaacc tttggagctg cagggtgtgt tagcaaacta caggaccaaa 2880
tatcctgctc aaactgtaac cccaaaaaat gctacagttg acagtcagca gatgaacact 2940
gaccacaagg ctgttttgga taaggataat gcttatccag tggagtgctg ggttcctgat 3000
ccaagtaaaa atgaaaacac tagatatttt ggaacctaca caggtgggga aaatgtgcct 3060
cctgttttgc acattactaa cacagcaacc acagtgcttc ttgatgagca gggtgttggg 3120
cccttgtgca aagetgacag cttgtatgtt tctgctgttg acatttgtgg gctgtttacc 3180
aacacttctg gaacacagca gtggaaggga cttcccagat attttaaaat tacccttaga 3240
aagcggtctg tgaaaaaccc ctacccaatt tcctttttgt taagtgacct aattaacagg 3300
aggacacaga gggtggatgg gcagcctatg attggaatgt cctctcaagt agaggaggtt 3360
agggtttatg aggacacaga ggagcttcct ggggatccag acatgataag atacattgat 3420
gagtttggac aaaccacaac tagaatgcag tgaaaaaaat gctttatttg tgaaatttgt 3480
gatgctattg ctttatttgt aaccattata agctgcaata aacaagttaa caacaacaat 3540
tgcattcatt ttatgtttca ggttcagggg gaggtgtggg aggtttttta aagcaagtaa 3600
aacctctaca aatgtggtat ggctgattat gatctctagt caaggcacta tacatcaaat 3660
atteettatt aaceeettta caaattaaaa agetaaaggt acacaatttt tgageatagt 3720
tattaatagc agacactcta tgcctgtgtg gagtaagaaa aaacagtatg ttatgattat 3780
aactgttatg cctacttata aaggttacag aatatttttc cataattttc ttgtatagca 3840
gtgcagcttt ttcctttgtg gtgtaaatag caaagcaagc aagagttcta ttactaaaca 3900
cagcatgact caaaaaactt agcaattctg aaggaaagtc cttggggtct tctacctttc 3960
tettettttt tggaggagta gaatgttgag agteageagt ageeteatea teaetagatg 4020
gcatttette tgagcaaaac aggtttteet cattaaagge attecaceae tgeteecatt 4080
catcagttcc ataggttgga atctaaaata cacaaacaat tagaatcagt agtttaacac 4140
attatacact taaaaatttt atatttacct tagagettta aatetetgta ggtagtttgt 4200
ccaattatgt cacaccacag aagtaaggtt ccttcacaaa gatccgggac caaagcggcc 4260
atcgtgcctc cccactcctg cagttcgggg gcatggatgc gcggatagcc gctgctggtt 4320
tectggatge egaeggattt geaetgeegg tagaacteeg egaggtegte eageeteagg 4380
cagcagctga accaactcgc gaggggatcg agcccggggt gggcgaagaa ctccagcatg 4440
agateceege getggaggat catecageeg gegteeegga aaaegattee gaageecaae 4500
ctttcataga aggcggcggt ggaatcgaaa tctcgtgatg gcaggttggg cgtcgcttgg 4560
teggteattt egaaceeeag agteeegete agaagaacte gteaagaagg egatagaagg 4620
cgatgcgctg cgaatcggga gcggcgatac cgtaaagcac gaggaagcgg tcagcccatt 4680
cgccgccaag ctcttcagca atatcacggg tagccaacgc tatgtcctga tagcggtccg 4740
ccacacccag ccggccacag tcgatgaatc cagaaaagcg gccattttcc accatgatat 4800
teggeaagea ggeategeea tgggteaega egagateete geegteggge atgegegeet 4860
tgagcctggc gaacagttcg gctggcgcga gcccctgatg ctcttcgtcc agatcatcct 4920
gategacaag accggettee atecgagtae gtgetegete gatgegatgt ttegettggt 4980
```

<210> 3 <211> 3584 <212> DNA <213> Artificial Sequence

<220> <223> Plasmid pCRXA 20

<400> 3

gatatcatat tggctcatgt ccaacattac cgccatgttg acattgatta ttgactagtt 60 attaatagta atcaattacg gggtcattag ttcatagccc atatatggag ttccgcgtta 120 cataacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc ccattgacgt 180 caataatgac gtatgttccc atagtagcgc caatagggac tttccattga cgtcaatggg 240 tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat atgccaagtc 300 cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc cagtacatga 360 ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct attaccatgg 420 tggatgcggt tttggcagta caccaatggg cgtggatagc ggtttgactc acggggattt 480 ccaagtctcc accccattga cgtcaatggg agtttgtttg ggcaccaaaa tcaacgggac 540 tttccaaaat gtcgtaataa ccccgccccg ttgacgcaaa tgggcggtag gcgtgtacgg 600 tgggaggtct atataagcag agctcgttta gtgaaccgtc agatcgcctg gagacgccat 660 ccacgctgtt ttgacctcca tagaagacac cgggaccgat ccagcctccg cggccgggaa 720 cggtgcattg gaacgcggat tccccgtgcc aagagtgacg taagtaccgc ctatagactc 780 tataggcaca cccctttggc tcttatgcat gctatactgt ttttggcttg gggcctatac 840 acccccgctt ccttatgcta taggtgatgg tatagcttag cctataggtg tgggttattg 900 accattattg accactcccc tattggtgac gatactttcc attactaatc cataacatgg 960 ctctttgcca caactatctc tattggctat atgccaatac actgtccttt cgctcggcag 1020 ctccttgctc ctaacagtgg aggccagact taggcacagc acaatgccca ccaccaccag 1080 tgtgccacac aaggccgwgg cggtagggta tgtgtctgaa aatgagctcg gagattgggc 1140 tegeaceget gaegeagatg gaagaettaa ggeageggea gaagaagatg eaggeagetg 1200 agttgttgta ttctgataag agtcagaggt aactcccgtt gcggtgctgt taacggtgga 1260 gggcagtgta gtctgagcag tactcgttgc tgccgcgcgc gccaccagac ataatagctg 1320 acagactaac agactgttcc tttccatggg ttttttctgc agtcaccggt cgaccgaagc 1380 ttcgcccggg cgggatcccg gcggccgccg gaattctgat cataatcagc cataccacat 1440 ttgtagaggt tttacttgct ttaaaaaacc tcccacacct ccccctgaac ctgaaacata 1500 aaatgaatgc aattgttgtt gttaacttgt ttattgcagc ttataatggt tacaaataaa 1560 gcaatagcat cacaaatttc acaaataaag cattttttc actgcattct agttgtggtt 1620 tgtccaaact catcaatgta tcttaggtac cacgtcaggt ggcacttttc ggggaaatgt 1680 gcgcggaacc cctatttgtt tatttttcta aatacattca aatatgtatc cgctcatgag 1740 acaataaccc tgataaatgc ttcaataata ttgaaaaagg aagagtatga ttgaacaaga 1800 tggattgcac gcaggttctc cggccgcttg ggtggagagg ctattcggct atgactgggc 1860 acaacagaca ateggetget etgatgeege egtgtteegg etgteagege aggggegeee 1920 ggttettttt gteaagaeeg acetgteegg tgeeetgaat gaaetgeagg aegaggeage 1980 geggetateg tggetggeea egaegggegt teettgegea getgtgeteg aegttgteae 2040 tgaagcggga agggactggc tgctattggg cgaagtgccg gggcaggatc tcctgtcatc 2100 tcaccttgct cctgccgaga aagtatccat catggctgat gcaatgcggc ggctgcatac 2160 tactcggatg gaagccggtc ttgtcgatca ggatgatctg gacgaagagc atcaggggct 2280 egegeeagee gaactgtteg eeaggeteaa ggegegeatg eeegaeggeg aggatetegt 2340 cgtgacccat ggcgatgcct gcttgccgaa tatcatggtg gaaaatggcc gcttttctgg 2400 attcatcgac tgtggccggc tgggtgtggc ggaccgctat caggacatag cgttggctac 2460 ccgtgatatt gctgaagagc ttggcggcga atgggctgac cgcttcctcg tgctttacgg 2520 tategeeget eeegattege agegeatege ettetatege ettettgaeg agttettetg 2580 actogaggoo agotgoatta atgaattggo coacgogogg ggagaggogg attgogtatt 2640 gggcgctett eegetteete geteactgta etegetgege teggtegtte ggetgeggeg 2700 ageggtatea geteaeteaa aggeggtaat aeggttatee aeagaateag gggataaege 2760 aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa aggccgcgtt 2820 gctggcgttt ttccataggc tccgccccc tgacgagcat cacaaaaatc gacgctcaag 2880 tcagaggtgg cgaaacccga caggactata aagataccag gcgtttcccc ctggaagctc 2940 ectegtgege tetectgtte egaceetgee gettaeegga taeetgteeg eettteteee 3000 ttegggaage gtggegettt eteatagete aegetgtagg tateteagtt eggtgtaggt 3060 egttegetee aagetggget gtgtgeaega acceeeegtt cageeegaee getgegeett 3120 atccggtaac tatcgtcttg agtccaaccc ggtaagacac gacttatcgc cactggcagc 3180 agccactggt aacaggatta gcagagcgag gtatgtaggc ggtgctacag agttcttgaa 3240 gtggtggcct aactacggct acactagaag aacagtattt ggtatctgcg ctctgctgaa 3300 gccagttacc ttcggaaaaa gagttggtag ctcttgatcc ggcaaacaaa ccaccgctgg 3360 tagcggtggt ttttttgttt gcaagcagca gattacgcgc agaaaaaaag gatctcaaga 3420 agateetttg atettteta eggggtetga egeteagtgg aacgaaaact caegttaagg 3480 gattttggtc atgagattat caaaaaggat cttcacctag atccttttaa attaaaaatg 3540 3584 aagttttaaa tcaatctaaa gtatatatga gtaaacttgg tctg

<210> 4 <211> 2361 <212> DNA <213> Cytomegalovirus

<400> 4

ctgcagtgaa taataaaatg tgtgtttgtc cgaaatacgc gttttgagat ttctgtcgcc 60 gactaaattc atgtcgcgcg atagtggtgt ttatcgccga tagagatggc gatattggaa 120 aaatcgatat ttgaaaatat ggcatattga aaatgtcgcc gatgtgagtt tctgtgtaac 180 tgatatcgcc atttttccaa aagtgatttt tgggcatacg cgatatctgg cgatacggct 240 tatatcgttt acgggggatg gcgatagacg actttggcga cttgggcgat tctgtgtgtc 300 gcaaatatcg cagtttcgat ataggtgaca gacgatatga ggctatatcg ccgatagagg 360 $\operatorname{cgacatcaag}$ $\operatorname{ctggcacatg}$ $\operatorname{gccaatgcat}$ $\operatorname{atcgatctat}$ $\operatorname{acattgaatc}$ $\operatorname{aatattggca}$ 420attagccata ttagtcattg gttatatagc ataaatcaat attggctatt ggccattgca 480 tacgttgtat ctatatcata atatgtacat ttatattggc tcatgtccaa tatgaccgcc 540 atgttgacat tgattattga ctagttatta atagtaatca attacggggt cattagttca 600 tageceatat atggagttee gegttaeata aettaeggta aatggeeege etegtgaeeg 660 cccaacgacc cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata 720 gggactttcc attgacgtca atgggtggag tatttacggt aaactgccca cttggcagta 780 catcaagtgt atcatatgcc aagtccggcc ccctattgac gtcaatgacg gtaaatggcc 840 cgcctggcat tatgcccagt acatgacctt acgggacttt cctacttggc agtacatcta 900 cgtattagtc atcgctatta ccatggtgat gcggttttgg cagtacacca atgggcgtgg 960 atageggttt gaeteaeggg gattteeaag teteeaeece attgaegtea atgggagttt 1020 gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataaccccg ccccgttgac 1080 gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc gtttagtgaa 1140 ccgtcagatc gcctggagac gccatccacg ctgttttgac ctccatagaa gacaccggga 1200 ccgatccagc ctccgcggcc gggaacggtg cattggaacg cggattcccc gtgccaagag 1260

tgacgtaagt	accgcctata	gactctatag	gcacacccct	ttggctctta	tgcatgctat	1320
actgtttttg	gcttggggcc	tatacacccc	cgctccttat	gctataggtg	atggtatagc	1380
ttagcctata	ggtgtgggtt	attgaccatt	attgaccact	cccctattgg	tgacgatact	1440
ttccattact	aatccataac	atggctcttt	gccacaacta	tctctattgg	ctatatgcca	1500
atactctgtc	cttcagagac	tgacacggac	tctgtatttt	tacaggatgg	ggtcccattt	1560
attatttaca	aattcacata	tacaacaacg	ccgtcccccg	tgcccgcagt	ttttattaaa	1620
catagcgtgg	gatctccacg	cgaatctcgg	gtacgtgttc	cggacatggg	ctcttctccg	1680
gtagcggcgg	agcttccaca	tccgagccct	ggtcccatgc	ctccagcggc	tcatggtcgc	1740
tcggcagctc	cttgctccta	acagtggagg	ccagacttag	gcacagcaca	atgcccacca	1800
ccaccagtgt	gccgcacaag	gccgtggcgg	tagggtatgt	gtctgaaaat	gagctcggag	1860
attgggctcg	caccgtgacg	cagatggaag	acttaaggca	gcggcagaag	aagatgcagg	1920
cagctgagtt	gttgtattct	gataagagtc	agaggtaact	cccgttgcgg	tgctgttaac	1980
ggtggagggc	agtgtagtct	gagcagtact	cgttgctgcc	gcgcgcgcca	ccagacataa	2040
tagctgacag	actaacagac	tgttcctttc	catgggtctt	ttctgcagtc	accgtccttg	2100
acacgatgga	gtcctctgcc	aagagaaaga	tggaccctga	taatcctgac	gagggccctt	2160
cctccaaggt	gccacggtac	gtgtc				